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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE APPLICATION NO. 10/663,202 09/16/2003 Shaam Periyapatna Sundhar

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SHAAM P. SUNDHAR 6 TALL TIMBERS DRIVE PRINCETON, NJ 08540-4206 EXAMINER

JIANG, CHEN WEN

PAPER NUMBER ART UNIT

3744

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	
Office Action Summary		10/663,202	SUNDHAR, SHAAM PERIYAPATNA	
		Examiner	Art Unit	
		Chen-Wen Jiang	3744	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
1)🖂	Responsive to communication(s) filed on 13 Se	eptember 2003.	•	
2a)□	This action is FINAL . 2b)⊠ This	action is non-final.		
3)□	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims				
5)□				
Application Papers				
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 16 September 2003 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 20030916. 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) 6) Other:				

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Bell (U.S. Patent Number 6,223,539).

Bell discloses a thermoelectric air-conditioning system. Referring to Figs. 10 and 11, the system 200 comprises a housing 202 pivotably mounted to base 204, a control switch 212, thermoelectric element 232. Referring to FIGS. 2 and 3, the rotor assembly 30 generally comprises a plurality of components including an annular first rotor 42, an annular second rotor 44 disposed below the first rotor 42, and at least one annular thermoelectric device 46 interposed between, and in thermal communication with, the first rotor 42 and the second rotor 44. The thermoelectric device is also known as a Peltier device which comprises at least one pair of dissimilar materials connected electrically in series and thermally in parallel, and typically comprises a series of n-type and p-type semiconductor elements connected electrically in series and thermally in parallel. Depending on the direction of current passing through the thermoelectric device 46, one surface will be heated and the opposing surface will be cooled. The heat exchanger 28 is connected to a power source (not shown), such as a battery of the proper voltage and power.

Application/Control Number: 10/663,202

Art Unit: 3744

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell 6,223,539) in view of Travis (U.S. Patent Number 5,046,329).

Bell discloses the invention substantially as claimed. However, Bell does not disclose the battery located in the base 204. Travis discloses battery located in the housing (Fig.6) in the same field of endeavor for the purpose of powering. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Bell with a battery in a housing in view of Travis so as to power the system.

3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marks (U.S. Patent Number 6,357,251) in view of Harrington (U.S. Patent Number 5,623,828) and further in view of Shimogori (U.S. Patent Number 6,192,702) or Cheng (U.S. Patent Number 5,953,933).

Marks discloses a personal air cooler. The cooler comprises a first housing 20,16, second housing 10, switch 90, and cold object bottle 40. The first housing 20,16 is separable from the second housing 10 by rotating 10 by rotating about hinge or pivot 24. Other types of cold objects may be used, for example, an electric powered thermoelectric element using the Peltier effect may be used instead of frozen object. The power source may include a build-in battery or an AC adapter. Harrington discloses the detail of the thermoelectric air cooler and Shimogori and

Art Unit: 3744

Cheng disclose the build-in battery located in the second housing. Therefore, it would have been

Page 4

obvious to one having ordinary skill in the art at the time the invention was made to provide the

apparatus of Marks with a thermoelectric cooler and a battery in the housing in view of

Harrington and Shimogori/Cheng so as to provide the cooling.

4. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chen-Wen Jiang whose telephone number is (703) 308-0275.

The examiner can normally be reached on Tuesday-Friday from 7:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Denise Esquivel can be reached on (703) 308-2597. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chen-Wen Jiang Primary Examiner